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Single-board computer packs video generator . . .PF, Nov. 11, p. 197
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16-bit one-board computer holds 256 kbytes of RAM. . .PF, Feb. 18, p. 220
16-kbyte memory board retains data up to 5 years. . .PF, May 13, p. 100
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STD-bus board controls two steppers independently. . .PF, Jan. 21, p. 230
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Z8000 board and software upgrade Z80-based systems. . .PF, May 13, p. 250
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Array processor uses twin units to hit 24 million flops. . .N, April 29, p. 39
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Buses, which tie boards to data, control, and power lines, form the backbone of microcomputer systems. . .SR, Dec. 23, p. 117
Business network combines Ethernet with token passing. . .N, Dec. 9, p. 36
CAD system halves gate array development time. . .N, Dec. 9, p. 35
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Computer industry's best will convene at this year's NCC in Houston. . .SR, May 27, p. 81
Controller smooths data flow through multiprocessor systems. . .S&S, Aug. 5, p. ss45
Dedicated machines take on data-base management. . .S&S, June 10, p. ss39
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Gate-array work station automates design and layout for bipolar, MOS parts. . .PF, Dec. 23, p. 208
Hand-held μC performs like a desktop computer . . .PF, Sept. 30, p. 219
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Network lets 32 stations talk at 800 kbits/s . . .PF, Oct. 14, p. 265
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Package lets DEC units run CP/M software . . .PF, June 24, p. 209
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Robotics comes into its own with improved Vision, sense perception, teaching languages . . .SR, April 29, p. 87
Safeguarding data integrity in on-line transaction processing. . .S&S, Feb. 18, p. 97
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The automated office will mix different equipment from various vendors. . . S&S, April 15, p. ss5
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Video digitizer brings image processing to minis . . .P, Jan. 21, p. 228
VLSI work station comes complete with CAD tools. . .PF, Dec. 23, p. 210

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Autocalibration system covers nearly all electrical parameters. . .PF (Wescon), Sept. 2, p. 110
Bar codes in the workplace: putting a system together. . .D, Sept. 2, p. 187
Benchtop tester speeds checking of linear devices. . .PF, June 24, p. 245
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CAE tool supports both design and routine tasks . . .D, May 27, p. 117
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Debugging tool simplifies MC68000 program writing. . .PF, May 13, p. 294
Development station emulates MC68000 hardware in real time. . .PF (Wescon), Sept. 2, p. 106
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μPs. . .PF, Sept. 30, p. 203

Development-system enhances user interface . . .PF, Sept. 2, p. 307

Development system interface expedites software design. . .D, Sept. 2, p. 167

Development system supports all microprogrammed designs. . .PF, May 13, p. 85

Development system supports MC6805/6804 8-bit μPs. . .PF, March 18, p. 259

Digital scope offers two 35-MHz channels. . .PF, April 15, p. 290

Diode-based curve-shaping circuit tailors waveforms. . .IFD, Aug. 19, p. 176

DPM makes easy work of scale changes. . .PF (Wescon), Sept. 2, p. 104

Early thermal testing speeds product development. . .D, April 29, p. 183

Emulator for 16-bit μPs uses no wait states . . .PF, Sept. 16, p. 220

Emulator helps develop both hardware and software. . .PF, Feb. 4, p. 178

Emulator supports many 8- and 16-bit μPs. . .PF, Feb. 4, p. 167

Ethernet-based development network shares resources. . .PF, March 18, p. 264

Evaluation kit can become a system emulator for the 6802. . .IFD, May 13, p. 210

Even in a digital age, scopes remain the instrument. . .SR, Sept. 2, p. 129

Extended data logger records 1500 channels . . .PF, Sept. 30, p. 206

Family offers GPIB function, pulse, synthesized generators. . .PF, May 13, p. 94

Fast analyzer shows how spectra vary over time . . .PF, May 27, p. 269

5½-digit DMMs keep cost down, accuracy up . . .PF, Feb. 4, p. 157

5½-digit multimeter includes data logger. . .PF, Sept. 16, p. 222

Fixture, tester whip through instrumentation amplifier tests. . .D, Feb. 4, p. 131

Generator 'draws' any waveform easily. . .PF, May 13, p. 290

GPIB interface device automates pot adjustments. . .PF, May 13, p. 289

GPIB scanner sells for $400. . .PF (Wescon), Sept. 2, p. 116

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HP makes its own 10-bit, 20-MHz hybrid a-d converter. . .N, Feb. 4, p. 39

ICE for 68000 executes to 10 MHz with no wait states. . .PF, Sept. 2, p. 239

ICE ready for speedy peripheral controller . . .PF, March 18, p. 266

ICE turns personal computer into development tool. . .D, May 27, p. 141

IEEE-488 bus analyzer aids debugging tasks . . .PF, May 13, p. 326

Instrument cuts the cost of data acquisition, control. . .PF, Sept. 30, p. 200

Linearizing module uses EPROM, eliminates calibration. . .PF, July 22, p. 203

Logic simulator verifies VLSI designs and sets tests. . .PF, Oct. 14, p. 286

Low-current meter emphasizes safety. . .PF, March 31, p. 182

Measuring industrial signals takes in-plant know-how. . .D, April 29, p. 157

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μP-based decoder orchestrates bar-code functions. . .D, Sept. 30, p. 151

μP debugger tracks data on map formed by LED matrix. . .PF, Feb. 4, p. 162

Microprocessor emulator assumes local-network role. . .D, Feb. 4, p. 93

Module extends PLA programmer. . .PF, Aug. 5, p. 295

100-MHz scope measures time and voltage automatically. . .PF, May 13, p. 93

PCM system speedily tests multiplexed data lines. . .N, March 31, p. 58

Plug-in unit converts Apple computer into digital scope. . .PF, Feb. 4, p. 158

Pod adapts bit-slice development system to bipolar μP. . .PF (Wescon), Sept. 2, p. 116

Powerful logic analyzer displays data in colors . . .PF, May 13, p. 98

Program converts test data into reliability numbers. . .D, Aug. 19, p. 157

PROM programmer is truly universal. . .PF, April 15, p. 296

Q-bus extender aids control-line testing. . .PF, April 15, p. 282

Settling time falls to programmable instruments. . .D, Sept. 2, p. 143

Signal generators cover from 2.3 to 12.5 GHz . . .PF, Jan. 7, p. 320

6½-digit multimeter measures ac to within 160 ppm. . .PF, Sept. 30, p. 199

Software adapts CRT for use as logic probe . . .IFD, April 29, p. 216

Software-driven emulator supports NSC800 chip. . .N, Feb. 4, p. 46

Speed, powerful diagnostics mark reference-board tester. . .PF, Dec. 9, p. 250.

Spooler cuts μP development time in half. . .PF, Aug. 19, p. 215

Stable, low-noise calibrator gives 7½-digit performance. . .PF, May 13, p. 96

Stand-alone emulator supports growing family of μPs. . .PF (Wescon), Sept. 2, p. 102

Stand-alone logger records 1024 bytes of 13-bit data. . .IFD, Sept. 16, p. 184

State analyzers move from lab to production area. . .D, May 13, p. 167

Switched-mode amplifier allows isolated dc current measurements. . .IFD, Sept. 2, p. 198

Synthesized source joins analog purity, digital speed. . .D, Sept. 30, p. 109

System emulates coprocessor pairs. . .PF, Feb. 18, p. 222

System uses 9445 μP to emulate Nova software . . .PF, June 24, p. 280

Technology Profile: Hewlett-Packard Co. . . .SR, Dec. 9, p. 73

Technology Profile: Hewlett Packard Co. . .SR, Dec. 23, p. 87

10-MHz emulator supports 8086 chip and coprocessors. . .PF, March 18, p. 304

10-MHz emulator supports 68000 and coprocessors. . .PF, April 15, p. 286

Test conference highlights efficiency and new approaches. . .N, Oct. 28, p. 40

Tester grabs μP bus for in-depth analysis. . .PF, Sept. 30, p. 211

Test set is ready for memories up to 1 Mbit . . .PF, Dec. 23, p. 234

Universal development tool lets designers use best μP. . .D, June 24, p. 149

Versatile logic analyzer is easy to use. . .PF, Sept. 16, p. 225

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VLSI tester accurate to ±1 ns calibrates itself quickly. . .PF, March 31, p. 141

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Waveform digitizer plugs into 7000 series. . .PF, Sept. 30, p. 212

Work station turns μC into 68000 development system. . .PF, Sept. 16, p. 218

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Bipolar process fuses with new cell structures for fast, dense memories. . .N, Oct. 14, p. 35

Bubble chip packs 4 Mbits into 1-Mbit space . . .D, Nov. 11, p. 111

Bubble memory serves LSI-11 host. . .PF, May 27, p. 216

Caches keep main memories from slowing down fast CPUs. . .D, Jan. 21, p. 179

Cache memories quicken access to disk data . . .S&S, May 13, p. ss41

Cache-memory functions surface on VLSI chip . . .D, Feb. 18, p. 159

Choose the right level of memory-error protection. . .S&S, Feb. 18, p. ss37

CMOS 16-k static RAMs: 8-bit vs 1-bit widths . . .D, Aug. 19, p. 121

Denser, faster memories will head the IC lineup at ISSCC '83. . .N, Dec. 9, p. 43

Disabled buffers "remove" unnecessary memory chips. . .IFD, Jan. 7, p. 308

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IBM gets design of faster 64-kbit RAM through pact with Intel. . .N, Sept. 30, p. 38

Intelligent memory systems can operate nonstop. . .D, March 18, p. 243

JEDEC to consider hidden signature for nonvolatile memories. . .N, March 31, p. 32

Match cache architecture to the computer system. . .D, March 4, p. 93

Memory chips of every type are exploding density limits. . .SR, Aug. 19, p. 81

MOS cache ICs darken future for bipolar RAMs . . .N, Jan. 21, p. 32

128-kbit ROM draws little power. . .PF, Aug. 5, p. 249

128-k ROMs come in CMOS and NMOS. . .PF, March 31, p. 172

OS-Winchester duo extends storage capacity . . .PF, March 31, p. 184

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Single-chip controllers cover all RAMs from 16-k to 256-k. . .D, Feb. 4, p. 119

64-k CMOS ROM increases speed with thinner line widths. . .PF (Wescon), Sept. 2, p. 103

64-k RAMs bring multiple benefits to memory boards. . .D, Jan. 7, p. 265

Thin-film detectors, X-ray lithography deliver 4-Mbit bubble chip. . .N, Oct. 28, p. 35

256-k dynamic RAMs need redundancy, new packaging, advanced MOS to cut costs. . .N, March 18, p. 39

Upgraded 64-kbit RAM design cuts chip area, boosts speed. . .N, June 10, p. 36

Wide-word 64-kbit RAM expands system performance. . .D, March 18, p. 231

Writable-control-store module emulates PROMs at top speed. . .PF (Electro), May 13, p. 97

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Automation advances for CMOS gate-array design. . .D, Dec. 9, p. 155

Chip encodes, decodes for serial transmission . . .PF, Dec. 9, p. 200

Chip runs bit protocol at 2 Mbits/s . . .PF, April 29, p. 297

Chipping away the barriers to the million device IC. . .SR, Aug. 5, p. 91

Chips get denser, faster, as software shortens turnaround time. . .SR, Dec. 9, p. 91

CHMOS microcontrollers cut power needs by 90% +. . .PF, Nov. 11, p. 240

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CMOS challenges bipolar for lead in semicustom logic. . .N, June 24, p. 37

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CMOS, μCs beat NMOS on speed and power . . .PF, July 8, p. 221

CMOS μC with on-chip EPROM emulates ROM version. . .D, Aug. 19, p. 99

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CMOS 6500 microprocessors slash power needs . . .PF, Dec. 23, p. 202

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DMA controller is geared for the HD68000 processor. . .PF, Sept. 30, p. 251

Digital advances at all levels combine to bring systems on a chip within sight. . .SR, June 10, p. 83

Digital ICs for signal processing to be highlighted at Southcon/82. . .N, March 18, p. 46

Digital switching matrix chip handles 256 by 256 channels. . .PF, Oct. 14, p. 252

Dual-processor μC has two disk-storage versions. . .PF, July 22, p. 199

ECL arrays boast 100-ps delays. . .PF, Dec. 9, p. 202

ECL prescalers run fast yet draw little power . . .PF, March 31, p. 194

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8-bit bipolar chip aims at peripheral control with more speed, power. . .N, Feb. 18, p. 32

Electro technical program abounds with LSI advances. . .SR, May 13, p. 79

Error-correction and -detection chip mates easily to 8-bit systems. . .PF, Dec. 23, p. 199

Europe pushes forward with digital IC technology. . .N, May 13, p. 41

Expandable circuit detects errors in 17.2 ns, corrects in 19.7 ns. . .PF, Sept. 2, p. 226

'Expandable' IC finds and fixes errors fast. . .D, Feb. 18, p. 177

Extended I/O μP contains RAM and timers . . .PF, Aug. 19, p. 188

Fabrication gains feed the growth of digital VLSI. . .SR, Feb. 18, p. 71

Fast 16-bit chip offers 41 mathematical instructions. . . PF, March 18, p. 280

FIFO architecture minimizes buffer delays. . .D, May 13, p. 181

FIFO circuit helps μPs produce Manchester coding. . .IFD, Dec. 9, p. 186

Floppy-controller chips handle data separation . . .PF, Jan. 21, p. 238

Floppy-disk control squeezes onto one chip. . .D, June 10, p. 203

4-bit μP is part of semicustom cell library. . .PF, May 13, p. 254

GaAs research devices reach dramatic levels of integration, complexity. . .N, Nov. 11, p. 31

Gate array choices continue to mushroom. . .PF (Wescon), Sept. 2, p. 94

Gate-to-gate delays decrease in two-layer arrays. . .PF, Dec. 9, p. 198

General-purpose microprocessors: Performance and features. . .SR, Oct. 14, p. 118

Hard-disk controller chip handles variety of interface requirements. . .PF, Sept. 2, p. 225

Hardware modification boosts Z80's counting rate to 2 MHz. . .IFD, May 27, p. 194

High- and low-end μPs expand MC68000 family . . .PF (Wescon), Sept. 2, p. 101

High-speed 24-pin PALs offer 2560 fusible links . . .PF, Oct. 14, p. 251

IC family being readied for digital signal processing. . .N, Jan. 21, p. 34

ICs push toward the era of one-chip systems . . .SR, Feb. 18, p. 69

Industry leaders see 1980s as decade of VLSI applications. . .N, Feb. 4, p. 38

Interface circuit provides all disk-control support. . .PF, Oct. 28, p. 195

Logic arrays offer prefab selection of logic elements. . .PF, Aug. 19, p. 185

Look to 4-bit one-chip μCs for the strongest I/O handling. . .D, May 13, p. 191

Low-power multipliers perform like bipolars . . .PF, April 29, p. 234

LSI time-keeping system links to most microcomputers. . .PF, Aug. 19, p. 190

Macrocell array increases gates to 1280. . .PF, March 18, p. 277

Mead-Conway designing: No IC experience needed. . .D, March 4, p. 115

Memory schemes dominate latest 16-bit μP competition. . .N, Feb. 18, p. 31

Microcode sequencer runs at 50 MHz. . .PF, Oct. 28, p. 197

μC chip with UART champions multiprocessor systems. . .D, Dec. 23, p. 169

Microcomputer software set to meet sterner demands. . .S&S, Feb. 18, p. ss47

Microcontrollers go CMOS without slowing down. . .D, Feb. 18, p. 169

μP fits 16-bit performance into 8-bit systems . . .D, April 15, p. 183

Microprocessor Special: Who makes what. . .SR, Oct. 14, p. 157

Microprocessors: Alternative sources. . .SR, Oct. 14, p. 155

Midcon/82 displays VLSI controllers for graphics. . .N, Dec. 9, p. 37

Multiplier IC breezes through mixed-number systems. . .D, April 15, p. 191

New members broaden 16-bit 68000 μP family . . .N, March 18, p. 40

New supercomputer, multiple-layer ICs among goals in Japan. . .N, April 29, p. 40

New techniques and tools ease design of custom VLSI. . .D, Jan. 21, p. 187

NMOS multiplier-accumulator matches bipolar devices. . .PF, May 13, p. 310

NSC800 processor forms the heart of all-CMOS board family. . .PF, April 15, p. 280

One-chip CMOS μC includes a-d converter and counter. . .PF, April 29, p. 239

On-chip memory management comes to 8-bit μP . . .SR, Oct. 14, p. 163

Peripheral controllers mate with 8- and 16-bit μPs. . .PF, Oct. 28, p. 255

Power shift register links μPs to peripherals . . .PF, June 10, p. 256

Schottky arrays contain up to 2000 gates. . .PF, May 13, p. 312

Semicustom CMOS chip mixes analog and digital parts. . .PF, July 22, p. 188

Signal-processing μC builds FFT-based spectrum analyzer. . .D, Aug. 19, p. 149

Signal processors to break cost barrier. . .N, May 27, p. 42

Simple controller replaces low-end microcomputers. . .N, April 15, p. 46

Single-chip microcomputer boasts 8 kbytes of ROM. . .PF, Oct. 28, p. 201

Single-chip microcomputers: Performance and features. . .SR, Oct. 14, p. 130

16-bit CMOS processor carries PDP-11 specs into two-chip package. . .N, July 22, p. 40

16-bit families swell with greater integration . . .SR, Oct. 14, p. 103

16-bit minicomputer CPU plus memory management combined on MOS chip. . .N, May 27, p. 39

16-bit multipliers trade speed for low-cost DIPs . . .PF, Sept. 2, p. 228

16-bit μP crams peripheral support on chip. . .D, June 10, p. 191

16000 series of μPs adds members, some in CMOS. . .N, May 27, p. 40

Standard cells put ICs in system designers' hands. . .D, Dec. 9, p. 139

The 68000 will soon come in single-chip μC form . . .N, March 4, p. 29

Technology exchange will give 8048 two serial bus architectures. . .N, Oct. 28, p. 36

Technology Profile: Hewlett-Packard Co. . . .SR, Dec. 9, p. 73

Technology Profile: Intel Corp. Part 1. . .SR, Oct. 14, p. 83

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Three chips plus memory match scientific minicomputer. . .N, March 31, p. 31

Three more controllers broaden support for 68000 μP. . .N, Sept. 2, p. 38

Top IC performance hinges on gamut of processing gains, from silicon to metal. . .SR, June 20, p. 69

Transfer technique expands μP's available I/O space. . .IFD, Sept. 30, p. 174

Transparent multiprocessing boosts μC throughput. . .D, April 15, p. 159

'Universal' system designs gate arrays from start to finish. . .D, Dec. 23, p. 149

VLSI: An impressive technology gets ready for new applications. . .N, March 31, p. 36

Write controller chip reduces disk drive electronics. . .PF, March 31, p. 162

Z80 support circuit puts many functions on one chip. . .PF, March 18, p. 279

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Carbon paste prevents PC-board corrosion . . .PF, Dec. 9, p. 257

Connector workshop addresses EMI, shielding standards. . .N, Dec. 9, p. 38

Copper-clad steel outperforms other lead-frame materials. . .N, July 8, p. 38

Dense wrap-wire boards ease μP system prototyping. . .PF, Sept. 16, p. 252

Device packaging poses growing problems for DOD's VHSIC program. . .N, June 24, p. 35

Dual-cavity carrier holds many chips. . .N, Sept. 16, p. 38

EPROM programmer handles 14 memories . . .PF, July 22, p. 208

Flat heat-pipe assemblies keep PC boards cool . . .PF, April 29, p. 272

Focus on thick films: Base metals and polymers loom large. . .PF, Feb. 18, p. 209

Hand-held hydrogen detector can sense 10 ppm . . .PF, March 31, p. 142

Handler automates PC board production. . .PF, March 31, p. 60E

High-density chip carriers space pads precisely . . .N, Sept. 16, p. 37

High-reliability unit controls heat smoothly . . .PF, Aug. 5, p. 274

Inserter installs 2-pin DIP capacitors in record speed. . .N, Sept. 16, p. 40

Lightweight breadboard has 50% more area . . .PF, May 13, p. 100

Machine places 60,000 varied-shape leadless chips an hour. . .N, March 31, p. 34

Micronova chassis supports I/O cards. . .PF, Sept. 2, p. 257

MnXn/ferrites extend performance limits of existing products. . .N, Jan. 7, p. 40

Molded silicone structure seals keyboards. . .PF (Wescon), Sept. 2, p. 108

Photochemical reactor deposits thin films. . .PF, April 29, p. 277

Photoplotter resolves PC masters to 0.0001-in. . . .PF, May 27, p. 247

Precision-optic system magnifies PC boards . . .N, March 31, p. 62

Process-control master uses memory-saving CPU. . .PF, June 24, p. 199

Rack accepts single- and double-sized Eurocards. . PF, Dec. 23, p. 236

Reduce loading and power use with active μP bus termination. . .IFD, March 18, p. 256

Rigid-flexible scheme aids board connections . . .N, March 31, p. 33

Work table inspects, measures PC boards and film. . .N, March 31, p. 57

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Adapting to human needs, terminals become easy to use and easy on the user. . .SR, Dec. 23, p. 97

Advanced work stations grow into professional tools. . .S&S, June 10, p. ss13

Advanced work stations move up to graphics and color. . .S&S, June 10, p. 113

Advances are in the works for 5¼-in. Winchesters, but demand controls the pace . . .S&S, April 15, p. ss59

ANSI answering concerns over-proposed graphics communications standards. . .N, Sept. 2, p. 55

Automated work station fills CAD gap. . .D, Jan. 21, p. 193

Business graphics matures with new software, terminals. . .S&S, Aug. 5, p. ss13

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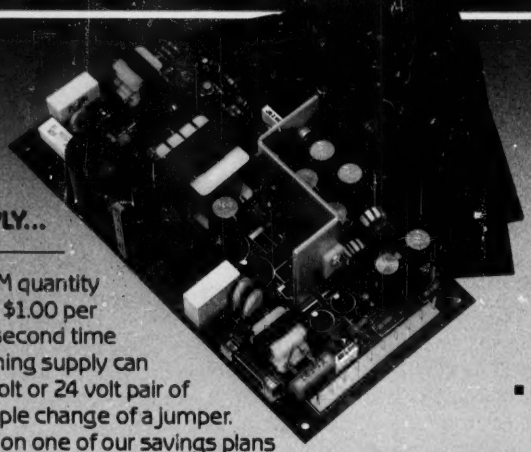

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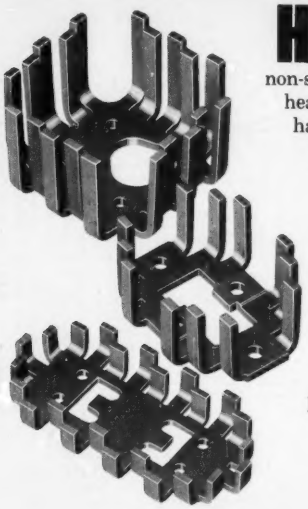

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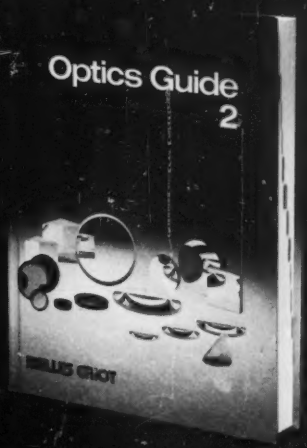

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